

August 15, 1988

CD-88-11 (MC)

Dear Manufacturer:

SUBJECT: Computerized Processing of Gasoline-Fueled Motorcycle  
Certification Data

We have developed a computerized system for processing gasoline-fueled motorcycle certification data. The use of this system will provide a number of significant advantages. For example:

1. Interaction between EPA and manufacturers will be expedited.
2. Computer generated output reports will provide manufacturers with a ready means for ensuring that data in the EPA data base are correct.
3. A short cut data submission procedure will provide manufacturers with a simple means for revising or updating previously submitted data.
4. A summary of year-to-date emission test results will be automatically updated each time new data are added.
5. The accumulation of certification information in the EPA computer data base will facilitate statistical analyses by manufacturers, EPA, and other interested parties.

The new system is based on the use of personal computers for processing certification data. Two different data entry forms are used for the submission of data. A "Family Information" form is used to provide information which identifies and characterizes a particular engine family. A "Test Information" form is used for each tested model or calibration in the family to provide information which confirms compliance with the applicable emission standards. Under this approach, family information will not have to be resubmitted every time test results are submitted as was done when the old combined family data/test results forms were used.

-2-

The computerized system is being implemented immediately in a fairly basic form and will be modified to enhance its usefulness for future model year programs. For example, optional

electronic transmission procedures for submitting data and obtaining output reports will be added.

We encourage you to begin using the new data input forms as soon as possible for any 1989 and later model year certification data. We believe their use will be to your advantage. If you have already submitted some 1989 model year certification data on the old previously used forms, we would appreciate your resubmission of the data on the new forms. Such resubmission will be very helpful to us in making a clean changeover to the new system. We believe it will be helpful to you in that it will expedite your review of the annual test results summary, and possibly eliminate the need for making any corrections or additions.

The use of the new standardized data entry forms for submitting certification information is described in detail in the enclosed document, "Use of the EPA Computerized System for Processing Gasoline-Fueled Motorcycle Certification Data." If you have any questions after reviewing these instructions, please contact Mr. T. Snyder at (313) 668-4376 or Mr. J. Bozek at (313) 668-4292. If you believe that a workshop for providing explanations regarding the new computerized system would be useful, please let us know as soon as possible. If there is interest in such a workshop, we will schedule it for the afternoon of September 21, 1988, following the next EPA/Industry bimonthly meeting.

Sincerely,

Robert E. Maxwell, Director  
Certification Division  
Office of Mobile Sources

Enclosure

8015b

USE OF THE EPA COMPUTERIZED SYSTEM  
FOR PROCESSING  
GASOLINE-FUELED MOTORCYCLE  
CERTIFICATION DATA

ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF MOBILE SOURCES  
CERTIFICATION DIVISION  
2565 PLYMOUTH ROAD  
ANN ARBOR, MICHIGAN 48105  
(313) 668-4200

Issue Date: July 25, 1988

7721b:07/29/88

## Table of Contents

CHAPTER	SUBJECT	PAGE
1	The Motorcycle Computerized Data Base	
	General Information	1
	Data Entry Details	1
	Output Report Details	3
2	Use of Certification Information Sheets	
	Family Information Sheets	4
	Test Information Sheets	5

## CHAPTER 1 -INTRODUCTION

### Motorcycle Computer Data Base Details

A new computerized system has been established for storing and processing motorcycle certification information. The effective use of the system involves the following manufacturer actions and resultant EPA reactions:

1. The manufacturer uses standardized hard copy data entry forms to provide new information, or revised information, regarding (a) the initial certification of an engine family or (b) the subsequent implementation of a running change applicable to that family.

2. EPA enters the submitted information into the computer data base to generate output reports which are forwarded to the submitting manufacturer for confirmation.

3. The manufacturer confirms the accuracy of the reported information, or if revisions are necessary, submits new data entry forms with the correct information.

4. EPA reviews the confirmed reports, and if all certification requirements are satisfied, uses the computer to (a) generate the requested certificate of conformity, or (b) document the implementation of the reported running change.

### Data Entry Form Details

#### The Certification Information Sheets (CIS)

The hard copy data entry forms which the manufacturer uses for the submission of certification information are called "Certification Information Sheets" (CIS).

Spaces are provided on the CIS for each item of required information. Each space is subdivided into individual blocks

in which the applicable letters and/or numbers can be entered. When more blocks are provided than are needed for a specific item of information, any group of sequential blocks can be used without regard to whether the entry of data is started to the left or the right of the allotted space. The actual entry of the information can be accomplished by any means which provides adequate legibility.

--2--

The same type of CIS is used for (a) providing new information, or (b) revising information which is already in the data base. When a CIS is used to revise previously submitted information, entries are needed only in connection with (a) the identifying blocks at the top of the form and (b) the specific data blocks that are applicable to the items of information which require revision.

Two different forms are used: the "Family Information Sheet" and the "Test Information Sheet."

#### The Family Information Sheet

One Family Information CIS is submitted for each engine family to provide information which identifies and characterizes the the subject engine family. The specific items of information which are entered on the family CIS include:

The manufacturer's corporate name

The manufacturer's designation for the engine family

The EPA standardized name for the family

The specified physical characteristics of the family

#### The Test Information Sheet

One Test Information sheet is submitted for each tested model or calibration to provide information which confirms

compliance with the applicable emission standards. The specific items of information which are entered on the test CIS include:

The engine family name

The identification of the model or calibration

The identification of the test engine or vehicle

The emission test results

Detailed instructions regarding the use of the family and test information sheets are presented in the Chapter 2 of these instructions.

--3--

#### Output Report Details

The generation of an output report is automatically triggered by the EPA computerized data handling system when the certification information which a manufacturer provides by submitting a completed family or test CIS is entered into the data base.

This report will not be accurate if errors were made when the CIS was completed or when the information provided was entered into the computer data base.

Some of the resultant errors in the report will be obvious because they are outside of the acceptable ranges. In such cases, warning notes will be automatically added to the report. Other kinds of report errors will be apparent only to the manufacturer who submitted the information on the CIS.

To ensure that all types of report errors are corrected, all computer generated reports are forwarded to the submitting manufacturer for verification, and if necessary, for revision by the submission of correcting CIS forms.

CHAPTER 2  
CERTIFICATION INFORMATION DATA FORMS

Family Information

Field	Description	Instructions
K01	Form	This entry has been completed.
K02	Process Code	Enter "N" -new submission or "C" -a correction.
K03	EPA Engine Family	Enter the EPA standardized engine family name.
K04	Manufacturer Engine Family	Only enter the manufacturer engine family name when it differs from the EPA stan- dardized engine family name.
K05	Corporate Name	Enter corporate name as it will appear on the certifi- cate of conformity.
K06	Number of Cylinders	Enter the number of engine cylinders.
K07	Displacement(s)	Enter the engine displacement in cubic centimeters: if more than one displacement in a family, enter the largest displacement first starting at the left.
K08	Fuel System Type	Enter "C" -carburetor and "F" -fuel injection systems.

K09	Method of Aspiration	Enter "N" -natural aspirated engines, and "T" -turbo-charged engines.
-----	----------------------	---

Field	Description	Instructions
K10	Family Sales	Enter the engine family projected sales for the model year.
K14	Family Models	Enter the vehicle model(s) contained in the engine family. If more than one model separate each model name with a semicolon (;).

#### Correcting The Family Information

When correcting or adding information to the family information sheet the first three fields (K01, K02, and K03) must be entered along with the field(s) being corrected or added. The complete field must be entered each time a correction or addition is made.

#### Test Information

Field	Description	Instructions
K101	Form	This entry has been completed.
K102	Process Code	Enter "N" -new submission or "C" -correction.
R103	EPA Engine Family	Enter the EPA standardized engine family name.

K104	Data Set Number	The data set number is assigned by the manufacturer. This number is used to identify the test information submitted within an engine family and must have a different number assigned to each set of test information submitted.
------	-----------------	--

Field	Description	Instructions
-------	-------------	--------------

K105	Vehicle Model	Enter the model the test vehicle represents.
------	---------------	--

K106	Displacement	Enter the test engine displacement in cubic centimeters.
------	--------------	--

K107	Vehicle I.D. Number	Enter the test vehicle identification number.
------	---------------------	---

K108	Emission Control System	Enter the types of emission control system the test engine represent. Use "EM" -engine modification, "EGR" -exhaust gas recirculation, "AIR" -air injection, and "CAT" - catalytic converter, etc. Start at the left and enter all emission control systems. If additional control system identifications are needed please contact EPA.
------	-------------------------	--

K109	Engine Code	Enter the test engine code (calibration).
------	-------------	---

K110	Number Carburetors-Venturies	This field is to be completed only when the engine is carbureted. Starting at the left enter the number of
------	------------------------------	--

carburetor(s) used on the engine and the number of venturies each carburetor has.

K111	Rated Power (kw) @ Engine RPM	Enter starting at the left the rated power in kilowatts and the revolutions per minute the rated power occurs.
K112	Rated Torque (Nm) @ Engine RPM	Enter starting at the left the rated torque in newton meters and the revolutions per minute the rated torque occurs.
Field	Description	Instructions
K113	Data Type	Enter "C" -certification test data and "R" -running change test data.
K114	Equivalent Inertia Weight (kg).	Enter vehicle equivalent inertia weight in kilograms.
K115	Road Load (nt)	Enter the vehicle road load force in newtons.
K116	Transmission Type	Enter vehicle transmission type "M-5" manual five speed, "M-6" manual six speed, "A-4" auto-matic four speed, etc.
K117	N/V Ratio	Enter the quotient of engine speed in revolutions per minute divided by vehicle speed in kilometers per hour measured in the highest (i.e., lowest numerical) transmission gear.

Records K118 through K124 are for OFFICIAL TEST RESULTS, DETERIORATION FACTORS, and CERTIFICATION LEVELS.

OFFICIAL TEST RESULTS shall be reported to the number of decimal places contained in the applicable emission standards expressed to one additional significant figure.

DETERIORATION FACTORS shall be reported to three places to the right of the decimal point. (Ref: 40 CFR 86.432-78 (d))

CERTIFICATION LEVELS to compare with the emission standards shall be reported to the same number of significant figures as contained in the applicable standards.

#### Correcting The Test Information

When correcting or adding information to the test information sheet the first four fields (K101, K102, J103 and K104) must be entered along with the field(s) being corrected or added. The complete field must be entered each time a correction or addition is made.

Motorcycle Certification Information Sheet Family Information = file CD8811\_1.PCX

Motorcycle Certification Information Sheet Test Information = file CD8811\_2.PCX